

well as other sensitive archeological sites would be destroyed. Shipping containers stored in open view and the equipment to move them would be an unsightly eye sore to all who see it including those who come to Easter Island to seek its beauty and mystery.

Serious consideration must be given to whether these proposals are in the best interest of Easter Island and the heritage of the Rapanui people. In the future I would like to know that the view from Rano Raraku and Maunga Pui has not changed and that La Pérouse remains the same as I see it in my aerial photos and as I saw it each morning I stepped outside my tent, clean and unspoiled.

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☒ **Comments on Pavel's Experiments: how the Easter Island statues "walked" and topknots were placed on the statues.**

The text of Pavel's paper (*RNJ*, Vol. 9(3):69-72) is not concerned with the subject of its title "Reconstruction of the transport of the *moai* statues and *pukao* hats". The text is about his several experiments and demonstrations regarding "walking" the giant statues of Easter Island and mounting a topknot "hat" on the head of a statue.

Pavel states that, according to legends, the statues simply walked. He cites a test conducted by Thor Heyerdahl on Easter Island that took 180 people to pull a 10 ton statue. However, Heyerdahl's experiment involved pulling a statue on a sledge in a horizontal position; "walking" was not attempted.

Pavel reports on five different attempts to walk the statues. Of the five, four were by Pavel and the fifth was by Heyerdahl, whose experiments were on dry soil. Of these, one was a performance for 11 thousand spectators which Pavel claims was a successful experiment although rain softened the ground and the bottom of the *moai* stuck in the mud, moving the dirt like a bulldozer. This suggests that it must have been a very short walk.

Pavel describes a possible method of transporting the topknots on the erect statues, and he questions whether the statues carried their *pukao* the entire route from Rano Raraku to their *ahu*. However, Heyerdahl (1975:162) had already answered that question, stating that the topknots were rolled from Puna Pau quarry to their destinations, there to be mounted on the statue heads.

In his discussion of transporting the statues down the slopes from the quarries, Pavel experimented with a method involving 14 wood levers. He does not mention the degree of slope on which his experiment took place, or how he used the levers. The face of the exterior slope of Rano Raraku quarry is at least 50 meters at a grade of 55° or more (Mulloy 1970:70). Mulloy also states that statues were lowered with ropes that passed through snubbing devices what controlled their descent; he mentions no levers in the lowering

procedure.

It is one thing to demonstrate that an erect statue can be moved by the tilt-twist method for a short distance, as Pavel has done. It is an entirely different matter to put this concept into practical use. He does not mention the susceptibility of toppling and breaking; or the risks involved in moving a statue on uneven terrain, over gullies, on soft dirt, or boulder concentrations. The upright position is the most hazardous way to move a statue. As Van Tilburg (1994:157) states: "... an upright statue, either tilted or pulled on a wooden platform over rollers will fall more than 50% of the time on a 10° slope."

One more item stands out as problematic. In raising a *pukao* with ropes and levers, Pavel mentions that they "... used the beams as a lever pivoted in the eyes of the *moai*..." I assume this is one of the reasons why the eye sockets were cut on the *moai* after they were erected. "... This is a gross misunderstanding of the symbolism inherent in the eyes of the statues, to say nothing of the damage that such pressure would have inflicted upon the eye sockets. The "opening" (carving) of the eyes of a statue activated its power and *mana* and made the statue *oranga ora*: alive. A quote from Van Tilburg (1994:157) sums it all up: "Just because a method may be conceptualized in a contemporary mind does not mean it is a justified projection of the Rapa Nui past."

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REVIEWS

Kulturtraditionen der Osterinsulaner und ihre Christianisierung. Huppertz, Josefine. 1994. J. Huppertz: Sankt Augustin. DM 44.00. 115 pages, plus index of names, references. Color prints, b & w illustrations, maps, tables.

Review by Regina Pinks-Freybott, M.A.

In her recent book, Josefine Huppertz (who has been writing about PNG, East Asia in general, and China for about 35 years) aims to examine two main themes that have been the center of discussions about the many mysteries surrounding Rapanui, or Easter Island, for many years.

First, the author presents us with a highly narrative history

of these island people, beginning with the mythical settlement of Hotu Matu'a and his men, and going on to the development of the indigenous culture that culminated in the development of the *kohau rongorongo*, the "script". The second theme of this book as the title shows is the discovery of the islanders and their traditions by the Europeans, especially the missionaries.

Despite this aim, Josephine Huppertz does seem to base many of her arguments on a broader, worldwide view, as might be inferred from the range of her interests mentioned above. This kind of argumentation is not very new for anyone who has been working scientifically on the Rapanui culture (just think of Thor Heyerdahl's theories).

For instance, in order to demonstrate the specific situation of this island culture, the introduction depicts man as the only living creature that has been able to conquer the oceans of the world and to explore foreign lands and peoples. Just as the Vikings conquered and traded in the north, east, and west of Europe during the 8th to the 11th century, so did various groups from central Asia and Taiwan some 40,000 years ago, turning their small boats to the east where their descendants successively settled Melanesia, Micronesia, and Polynesia. This seafaring activity was not only important in that new areas could be explored and settled the sea routes developed were also useful for establishing and maintaining trading contacts, and strengthened traditions of exchange and cultural contacts.

The significance of the settlement of Easter Island (in fact, Rapanui /Rapa Nui as the indigenous name for the island, is not mentioned once in the book!) lies in the legend of Hotu Matu'a. The theory is evolved by the author, that the land of Hiva, where, according to the legend, Hotu Matu'a and his people originated, is in fact New Zealand. The argument is as follows: the great natural catastrophe prophesied in the legend could have been one of the numerous volcanic eruptions that take place in and around New Zealand (such as the recent eruption of Mount Ruapehu in September 1995). Hotu Matu'a and his people probably lived in the interior parts of New Zealand, whereas other (i.e. Maori) people occupied the coastal regions. In around 1440, increased volcanic activity resulted in the flooding of various coastal regions. Hotu Matu'a is referred to as a "son of the ocean," and so it seems a reasonable assumption that this would have been an appropriate time for him to decide to leave New Zealand. In addition, the author points out that Hotu Matu'a was almost certainly wearing a *rei miro*, probably the one now held in the San Francisco Museum. The *rei miro* was thought to be 250–300 years old when a companion of Captain Geiseler bought it in 1882, i.e., the *rei miro* must be manufactured around 1430. This *rei miro* is decorated with some *rongorongo* characters, which also provide some hints as to the origin of Hotu Matu'a: the term *rongorongo* could (according to Huppertz), be based on the name of the valley Orongo rongo on the north island of New Zealand. Consequently, the people in Hotu Matu'a's group and their descendants are now called the "Polynesians," (because they originated from the Polynesian New Zealand), whereas the

people who lived on Rapanui before the "Polynesians" arrived are named "Melanesians".

Huppertz is clearly following the theories of Thor Heyerdahl, who suggested that there may be a connection between Rapanui and South America, and that the people of Rapanui are a living conglomerate of many cultures and peoples. In one of the maps included at the end of her book, the author illustrates several travel routes, such as that of Heyerdahl's boat "Kon Tiki", as well as that of an Inka called Tupac Yupanqui, who traveled in the Pacific region probably in 1471, that support her theory of cultural contacts between the western (Japan) and eastern (Peru) borders of the Pacific.

The author supports her assumption that the Rapanui people came from a mixture of different cultures by citing statements from recent historiographers like Behrens, who described the skin color of the people as "brownish, like a Spaniard; . . . some are more black, but some are nearly white; . . . some red, as if they have a sunburn." The reader is of course justified in asking whether such statements really provide strong enough evidence to support the conclusion that the people of Rapanui came from different cultures from around the Pacific, such as Peru, Melanesia, Japan, etc. Even this first part of the book gives the reader the strong impression that the author's knowledge is lacking in some essential elements that are a real "must" when publishing a serious work on this island.

The next part of the book deals with the burial traditions and some religious ideas and practices. The author explains the function of the *ahu* as burial sites and the *moai* as images of the ancestors, and again demonstrates that some rites and traditions show an interesting relationship to other parts of the world, especially Cuzco (Peru) and certain parts of New Guinea. However, in her description of the rites surrounding the "bird-man" in the chapter "Osterinselschrift", one again notices the lack of intensive research that characterizes the book. The bird-man rite is described as a "ceremony of the state" ("Staatsfeier") in which the people probably worshipped the "ghost of the sky," the "ghost of the earth" and the "ghost of the ocean." Recent research that has provided evidence of the precise process, goals, and the typical character of this unique ceremony are completely disregarded.

Regarding the evolution and the special attributes of the characters in the Rapanui script, new "evidence" is presented, based on a well-known theory from the early years of research on the Rapanui culture. In Poland, Beon Z. Szalek has been studying the ancient scripts of Mohenjo Daro and Rapanui for 20 years. After comparing the ligatures of these scripts, he concluded that the language in the *kohau rongorongo* must have a close relationship to one of the languages of the Dravidian peoples of India. In many cases, the character for "bird" is similar to other characters that have a meaning related to death: in the Tamil language (which belongs to the Dravidian family), the concepts of "bird" and "death" can be expressed with the same word. If such a "deciphered" character is then, especially in ligatures, interpreted in combination with various others, one may be able to construct

different but related meanings of these ligatures.

Since the characters in nearly all ancient scripts are based on depictions of real world objects, it is not surprising that similar characters are used in different scripts. But, argues Huppertz, if two scripts contain a lot of identical ligatures, or even similar individual characters, this could not have happened by chance. Consequently, the script of Mohenjo Daro is probably the ancestor of the *kohau rongorongo* of Rapanui.

European seafarers were exploring the islands in the South Sea during the early 18th century, and Rapanui was discovered by Jacob Roggeveen on Easter Sunday, 1722. Several ships from different parts of Europe followed his route and visited this small island during the next 150 years, e.g. James Cook, Georg Forster and Johann Heinrich Forster in 1774, La Pérouse in 1786, Otto von Kotzebue and Adalbert von Chamisso in 1816, and Frederick W. Beechey in 1825. Most of them used the island during the long passage across the Pacific ocean to replenish their water and food supplies or to repair the ships. Some of these explorers had a very friendly impression of the island's people, while others described more hostile meetings between the crew and the indigenous people. When Peruvian slave-traders kidnapped a number of men from Rapanui in 1862 in order to take them back to Peru, the existence of the people of Rapanui was seriously endangered for the first time. Various diseases were introduced, large areas of the island were used as farm land by the Frenchman Dutrou-Bornier, and living space for the indigenous people was strictly limited.

At this time, missionaries from the French "Congrégation des Sacrés-Cœurs" began to intervene. The French bishop of Tahiti, Tepano Jaussen, was interested in trying to preserve what remained of the island's traditional culture. The first missionary, Eugène Eyraud, came to the island in 1864. Although living conditions were hard in the first few months, Eyraud would not give up and carried on his missionary work for many years, later together with Hippolyte Roussel. Some of the cultural attributes they described e.g., conceptions of personal law, property, or religion can be compared with several examples from other parts of the world, e.g. the Sepik region of Papua New Guinea, or even Alexander von Humboldt's observations of the Chayamas people in Venezuela.

The impression the author gains from all the missionaries who worked on Rapanui is that, in contrast to the colonial authorities or traders, they were the sort of people who took care of their new parish. On the one hand, they acted as agents of the colonial political power, but on the other they also appear to have tried to protect the indigenous peoples and their cultures. Since they also learned the local languages, and even often used them in church, they provided their parishioners new support in a world that had taken away the ancient traditions and beliefs. Huppertz reduces the success of the missionaries on Rapanui (and in the whole of Polynesia) to the replacement of an ancient (threatening and arbitrary) tabu system by a new (harmless and invariable) system of Christian religion.

Today, the religious life on Rapanui is strongly influenced by the last missionary, Bertrand Riedl, who died on February 4, 1994. Visitors can see his efforts to integrate traditional culture in, for instance, the architecture of the church in Hanga Roa. On Sundays, one can listen to the moving hymns sung in the church in the Rapanui language, whereas in everyday songs, Tahitian or Tuomotuan variants are preferred by the people.

In her conclusion, the author maintains that while scientists studying ancient cultures in most cases only want to make their (academic) mark, and are not seriously interested in the people living this culture, missionaries want to help the people in an era where industrialization is spreading throughout the world. Since missionaries live for several years with these people, she suggests, they are able to understand the intellectual world of their parishioners, whereas the social anthropologist is only interested in material objects and whether they are of artistic interest for ethnographic museums. These museums, she feels, collect objects on the basis of their artistic value, and not their actual (i.e., traditional) meaning.

In my opinion, such a statement seems quite unjustified with regard to Rapanui research. This island may be one of the few cultures in which missionaries helped to preserve the traditions. But it is also one of the few regions in the world whose material and non-material culture has been documented and researched thoroughly, not only in museums but also by conscientious scientists who tried to let the island people take part in their research, as demonstrated by the Sebastian Englert Museum in Hanga Roa, the Easter Island Foundation, and indeed this journal. This statement by Huppertz, as well as several other parts of her book, show a grievous ignorance of some extremely important facts about this unique culture. The neglect of these facts led her to interpretations that in many cases could not be accepted, thus weakening the effect of the original intention of this book.

Looking at the positive side, this book does give a short overview of some of the cultural traditions of Rapanui, and provides some useful insights into missionary activities on this island. One good idea was to include biographical notes on various people discussed in the text in separate typeset boxes, so that the reader gets interesting information without disturbing the main text.

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